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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,545	04/26/2001	Dennis P. Bobay	03-DV-7090	9760
23465	7590	04/09/2003		
JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740			EXAMINER CUEVAS, PEDRO J	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/681,545	BOBAY ET AL.	
Examiner	Art Unit		
Pedro J. Cuevas	2834		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 21 February 2003 .

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 5-18 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 5-18 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,986,379 to Hollenbeck et al. in view of U.S. Patent No. 4,701654 to Tatukawa et al.

Hollenbeck et al. discloses the construction of a rotor cup assembly for an electric motor, said rotor cup assembly (230) comprising a housing comprising:

a top,

a bottom,

a sidewall (232) extending circumferentially from said top and having a first diameter, said sidewall and said top defining a cavity, and

an annular flange (flange - added by the examiner) extending circumferentially from said sidewall.

However, it fails to disclose an annular flange having a first inner diameter, a second inner diameter, and a first thickness, said first inner diameter less than said second inner diameter for strengthening said sidewall.

Tatukawa et al. teaches the construction of the rotor structure of magneto generator with a flange (5c) having a first inner diameter, a second inner diameter, and a first thickness, said

first inner diameter less than said second inner diameter for the purpose of retaining magnet (4) and reinforcing member (5).

It would have been obvious to one skilled in the art at the time the invention was made to use the flange disclosed by Tatukawa et al. on the rotor cup assembly disclosed by Hollenbeck et al. for the purpose of retaining magnet (4) and reinforcing member (5).

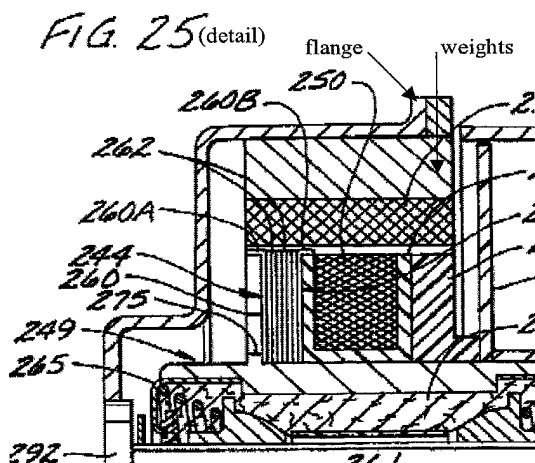
3. With regards to claim 6, 7, 9 and 10 Hollenbeck et al. in view of Tatukawa et al. disclose a rotor cup assembly, wherein:

 said annular flange is configured to have an edge, said edge outwardly flared from said sidewall by an angle Φ ;

 said annular flange configured to receive a plurality of weights (weights - added by the examiner) to facilitate a desired level of rotor balance;

 said annular flange second diameter greater than said housing sidewall first diameter, as shown in Figure 25; and

 said annular flange provides a smooth surface for pressing an item into said rotor cup.



4. With regards to claim 8, Hollenbeck et al. discloses the claimed invention except for a portion of the annular flange being removable for facilitating rotor balance.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the flange removable, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. Nerwin v. Erlichman, 168 USPQ 177, 179.

It should be emphasized that “apparatus claims must be structurally distinguishable from the prior art.” MPEP 2114. In re Danly, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) it was held that apparatus claims must be distinguished from prior art in terms of structure rather than function. In Hewlett-Packard Co v Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), the court held that: “Apparatus claims cover what a device is, not what it does.” (emphasizes in original). To emphasize the point further, the court added: “An invention need not operate differently than the prior art to be patentable, but need only be different” (emphasizes in original). That is, in an apparatus claim, if a prior art structure discloses all of the structural elements in the claim, as well as their relative juxtaposition, then it reads on the claim, regardless of whether or not the function for which the prior art structure was intended is the same as that of the claimed invention.

5. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,986,379 to Hollenbeck et al. in view of U.S. Patent No. 4,701654 to Tatukawa et al. as applied to claims 5-10 above, further in view of U.S. Patent No. 6,051,900 to Yamaguchi.

Hollenbeck et al. in view of Tatukawa et al. disclose the construction of an electric motor as described above.

However, it fails to disclose a rotor shaft extending through said rotor cup, and an annular flange for strengthening said sidewall.

Yamaguchi teaches the construction of a flat coreless vibration motor having a rotor shaft (2) extending through a bracket (1) for the purpose of supporting and physically connecting the eccentric rotor (3) to the bracket.

It would have been obvious to one skilled in the art at the time the invention was made to use the rotor shaft extending through a rotor cup as disclosed by Yamaguchi on the electric motor disclosed by Hollenbeck et al. for the purpose of supporting and physically connecting the eccentric rotor (3) to the bracket.

6. With regards to claims 12 and 16, Yamaguchi discloses:

a rotor cup top including an opening (1a) sized to accept said rotor shaft; and
an electric motor comprising an inside-out motor comprising an external rotor having magnetic elements (6) mounted on said rotor and said stator located inside the magnetic elements.

7. With regards to claim 13 and 15, Hollenbeck et al. in view of Tatukawa et al. discloses a rotor cup:

configured to receive a plurality of weights (weights - added by the examiner) to facilitate a desired level of rotor balance; and
wherein said annular flange second diameter is greater than said housing sidewall first diameter.

8. With regards to claim 14, discloses the claimed invention except for a portion of the annular flange being removable for facilitating rotor balance.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the flange removable, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. Nerwin v. Erlichman, 168 USPQ 177, 179.

9. With regards to claim 17 and 18 Hollenbeck et al. in view of Tatukawa et al. disclose a rotor cup assembly, wherein:

said annular flange is configured to have an edge, said edge outwardly flared from said sidewall by an angle Φ ; and

said annular flange provides a smooth surface for pressing an item into said rotor cup.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for

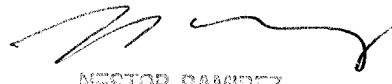
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the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
March 28, 2003



NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
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